

Notice of Allowability

Application No.

10/751,068

Examiner

Thomas E. Lazo

Applicant(s)

SOLOMON, COLLINS

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 4-6.
3. ☒ The drawings filed on 05 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 1/5/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 03292005.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Collins Solomon, Jr. on 3/29/05.

The application has been amended as follows:

IN THE CLAIMS:

Claim 4 has been renumbered as claim 3 under 37 CFR 1.126.

Claims 1, 2, and renumbered claim 3, have been canceled.

Claims 4, 5, and 6 have been added as follows:

4. An adjustable piston pump for displacement and or extraction of remnant from soft soil and or soft sand comprises: a pump casing cylinder with handle for support, a shaft rod with a handle and an adjustable piston, wherein the pump casing cylinder is open at one end, capped at the other end and accepts a movable shaft rod through the center of the capped end of the pump casing cylinder, the shaft rod is retractable through the center of the capped end of the pump casing cylinder and is connected to a shaft rod handle, the end of the shaft rod that connects to said shaft rod handle extends outside the capped end of the pump casing cylinder, the portion of the shaft rod that extends through the capped end of the pump casing cylinder and inside the body of the pump casing cylinder is attached to a movable adjustable piston that contains a flexible ball therein, and the force applied to the flexible ball of the adjustable piston is governed

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by rotating said shaft rod handle clockwise or counter-clockwise followed by the upward and downward pumping of the shaft rod.

5. An adjustable piston pump for displacement and or extraction of remnant from soft soil and or soft sand as claimed in claim 4, wherein said flexible ball permits regulation of the pumping pressure as said shaft rod handle is rotated clockwise or counter-clockwise, said shaft rod handle turned in a clockwise direction compresses and deforms the flexible ball and wedges the flexible ball more tightly against the inside wall of the pump casing cylinder providing increased pumping power for bi-directional displacement and or extraction of remnant, and said shaft rod handle turned in the counter-clockwise direction conforms the flexible ball back to its original state subsequently decreasing pumping power.

6. An adjustable piston pump for displacement and extraction of remnant from soft soil and or soft sand as claimed in claim 4, wherein remnant from soft sand and or soft soil is displaced or extracted with each stroke of the shaft rod, a quick downward stroke displaces remnant and a quick upward stroke extracts remnant, remnant is flushed from within the holes of soft sand and or soft soil, a core sample is extracted from soft sand and or soft soil as well as remnant from within the holes of soft sand and or soft soil, and the core sample and remnant are retained in the open end area of the pump casing cylinder for storage.

The above changes to the claims have been made to more clearly claim the invention.

REASONS FOR ALLOWANCE

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The instant invention is deemed to be directed to an unobvious improvement over the invention patented in U. S. Patent No. 5,505,098 to Turiff et al. The improvement comprises An adjustable piston pump with a movable adjustable piston that contains a flexible ball therein, wherein a force applied to the flexible ball of the adjustable piston is governed by rotating the shaft rod handle clockwise or counter-clockwise followed by the upward and downward pumping of the shaft rod for the purposes of more easily adjusting the pump seal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

PRIOR ART

The patent to Turiff et al. is cited for the showing of a piston pump similar to applicant's but lacking a movable adjustable piston that contains a flexible ball therein.

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of five patents.

Puckett (4,819,735), Zapico (4,729,437), Stewart (4,096,749), Walesch et al. (3,707,197), and Hackerson (Des. 269,844) are cited to show the core sampling devices.

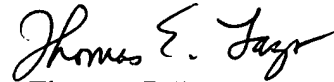
Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to status of this application or proceeding should be directed to the Patent Application Information Retrieval (PAIR) system. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.



Thomas E. Lazo
Primary Examiner
Art Unit 3745

TEL
March 29, 2005